Appl. No. 09/764,560
Atty. Docket No. 8392
Amdt. dated November 10, 2003
Reply to Office Action of May 8, 2003

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A treatment composition, comprising:

i) an aqueous continuous phase;

ii) a reactive component comprising: a) a reactive agent selected from a compound comprising a reactive group, the reactive group selected from the group consisting of either an electrophilic reactive group selected from the group consisting of halotriazine, haloquinoxaline, halopyrimidine, vinylsulfone, □-haloethylsulfone, □-sulfatoethylsulfone, acrylates, methacrylate, acrylamide, methacrylamide, maleimide, epoxide, acylhalide, ester, carbamate, dithiocarboxylic acid ester, alkoxysilane, thiosulfate, anhydride, urea derivative, isothiocyanate, isocyanate, lactone, thiosulfate, isothiuronium, azolactone electrophilic groups and mixtures thereof, or a protected thiol reactive group having the formula

$$R—(S—Pr)_m$$

where R is a mono or multivalent cosmetically active functional group, S is sulfur, Pr is a protecting group and m is an integer between 1 and 100; and b) a water immiscible solvent, wherein the water immiscible solvent solubilizes the reactive agent; and

iii) a cationic surfactant comprising a quaternary ammonium halide ~~one or more surfactants~~ wherein the cationic surfactants emulsify the reactive component in the aqueous phase to form a bi-layer emulsion.

wherein the composition further comprises cholesterol wherein the ratio of cholesterol to cationic surfactant ranges from about 0.5:1.0 to about 1.5:1.0.

2. (original) A treatment composition according to Claim 1, wherein the reactive agent is covalently reactive with an amino acid based substrate.

3. (original) A treatment composition according to Claim 2, wherein the reactive agent is covalently reactive with human hair.

4. (currently amended) A treatment composition according to Claim 3, wherein the reactive agent comprises one or more reactive groups selected from the group consisting of electrophilic groups, a nucleophilic groups, protected thiol groups and mixtures thereof.

5. (original) A treatment composition according to Claim 4, wherein the reactive agent also comprises a cosmetically active functional group.

6. (original) A treatment composition according to Claim 1, wherein the treatment composition comprises from about 0.01% to about 10% by weight of the composition, of the reactive agent; from about 1% to about 50% by weight of the composition, of the water immiscible solvent; from about 1% to about 50%, by weight of the composition, of the surfactants; and from about 20% to about 95%, by weight of the composition, of the aqueous continuous phase.

7. (canceled)

8. (canceled)

9. (canceled)

10. (currently amended) A treatment composition according to Claim 19, wherein the protecting group is selected from the group consisting of heterocyclic protecting groups, sp^2 aliphatic trigonal carbon protecting groups, sp^3 carbon electrophilic protecting groups, phosphorus protecting groups, metal based protecting groups, non-metal and metalloid based protecting groups other than phosphorus, energy-sensitive protecting groups and mixtures thereof.

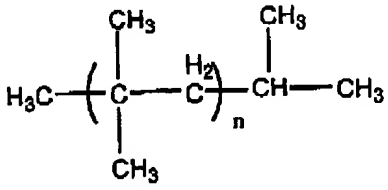
11. (original) A treatment composition according to Claim 1, wherein the water immiscible solvent comprises solvents selected from the group consisting of a volatile silicone compounds, nonvolatile silicone compounds, volatile hydrocarbons, nonvolatile hydrocarbons, propylene carbonates and mixtures thereof.

12. (original) A treatment composition according to Claim 11, wherein the water immiscible solvent comprises solvents selected from the group consisting of linear and cyclic polydimethylsiloxanes and mixtures thereof.

13. (original) A treatment composition according to Claim 12, wherein the water immiscible solvent comprises hexamethyl siloxane and cyclomethicone.

14. (original) A treatment composition according to Claim 13, wherein the water immiscible solvent is selected from volatile and nonvolatile hydrocarbon compounds having about 10 to 30 carbon atoms.

15. (original) A treatment composition according to Claim 14, wherein the water immiscible solvent comprises compound depicted by the following general structure wherein n ranges from 2 to 5,



16. (original) A treatment composition according to Claim 1, wherein the surfactant is chosen from the group consisting of anionic surfactants, cationic surfactants, nonionic surfactants, amphoteric surfactants, zwitterionic surfactants, and mixtures thereof.

17. (original) A treatment composition according to Claim 16, wherein the surfactant comprises from about 1% to about 20% of one or more quaternary ammonium halides, and from about 0% to about 20% of cholesterol.

18. (previously amended) A treatment composition according to Claim 16, wherein the surfactant from about 1% to about 20% of phospholipids.

19. (previously amended) A treatment composition according to Claim 16, wherein the surfactant comprises from about 1% to about 10% of a quaternary ammonium halide, and from about 1% to about 20% of a nonionic surfactant.

20. (original) A treatment composition according to Claim 1, wherein the reactive agent is charged.

21. (original) A treatment composition according to Claim 1, wherein the reactive agent is charged and the surfactants have the same net charge as the reactive agent.

22. (previously amended) A treatment composition according to Claim 1, wherein the treatment composition comprises from about 1% to about 4%, by weight, of thiol pyrimidinium, from about 3% to about 30%, by weight, of a volatile hydrocarbon compound having about 12 to about 24 carbon atoms and having a boiling point of about 90°C to about 250°C, from about 5% to about 30%, by weight, of cetyltrimethylammonium chloride, and from about 36% to about 91%, by weight, of the aqueous continuous phase.

23. (original) A treatment composition according to Claim 22, wherein the treatment composition further comprises from about 0.1% to about 10%, by weight, of a crystalline, hydroxyl-containing stabilizer.

24. (original) A method of treating amino acid based substrates by applying to the substrates an effective amount of composition according to Claim 1, wherein the composition provides a long-lasting treatment effect.

25. (original) A method of treating hair to provide hair benefits selected from the group consisting of bleaching, coloring, conditioning and mixtures thereof by applying to hair an effective amount of composition according to Claim 1, wherein the composition provides a long-lasting treatment effect.

26. (previously added) A treatment composition according to Claim 16 wherein the surfactant is a cationic surfactant selected from the group consisting of cetyltrimethylammonium chloride, cetyltrimethylammonium bromide and mixtures thereof.

27. (previously added) A treatment composition according to Claim 26 wherein the composition further comprises cholesterol and wherein the ratio of cholesterol to cationic surfactant is in a range from about 0.1 : 1.0 to about 1.0 : 1.0.

28. (previously added) A treatment composition according to Claim 27 wherein the ratio of cholesterol to cationic surfactant is in a range of from about 0.5 : 1.0 to about 1.5 : 1.0.

29. (previously added) A treatment composition according to Claim 28 wherein the ration of cholesterol to cationic surfactant is in a range from about 0.7 : 1.0 to about 1.25 : 1.0.

30. (previously added) A treatment composition according to Claim 21 wherein the reactive agent has a cationic charge and the surfactant has a cationic charge.

31. (new) A treatment composition according to Claim 1 wherein the quaternary ammonium halide is selected from the group consisting of cetyltrimethylammonim chloride, cetyltrimethylammonium bromide and mistures thereof.

32. (new) A treatment compositions accordint to Claim 1 wherein the ratio of cholesterol to cationic surfactant ranges from about 0.7:1.0 to about 1.25:1.0.